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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/714,950

11/18/2003

Miyuki Fukasawa

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22428 7590 06/17/2009
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EXAMINER

TRAN, SUSAN T

ART UNIT

PAPER NUMBER

1615

MAIL DATE

DELIVERY MODE

06/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/714,950	Applicant(s) FUKASAWA ET AL.	
	Examiner S. Tran	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/06/09 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recited "suspending an oil-based water-immiscible core material in an aqueous solution consisting essentially of gum arabic, and then gradually adding *the gum arabic solution to an aqueous-solution* of an enteric anionic cellulose derivative" in lines 2-4. It is not entirely clear what the "gum arabic solution" comprises. Does this gum arabic solution also comprise the oil-based water immiscible core material? From page 4, lines 7-14 of the present specification, it is clearly states that the oil-based material is suspended in an aqueous solution of gum arabic as a core material, then

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mixed with an aqueous alkaline solution of an enteric anionic cellulose derivative.

Further clarification is requested.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 9, 11 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Yan US 6,974,592 and Temple et al. US 5,670,255.

Yan teaches a microcapsule comprising shell composed of polymers include gelatin, gum arabic, carboxymethylcellulose or a mixture thereof (column 2, lines 66 through column 3, lines 1-9). The shell can be composed a two-component coacervation complex system comprising first and second polymers (column 3, lines 10-

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27). Yan further discloses a process for preparing microcapsule comprising providing an aqueous mixture of a first polymer component of shell material, dispersing a loading substance into the aqueous mixture, then adding a second polymer component of shell material to the aqueous mixture to form a primary shell (column 4, lines 18-60; and claim 47). Loading materials to be encapsulated are disclosed in column 2, lines 35-65, which include oils, and vitamins such as vitamin E. First polymer component includes gelatin type A (claim 48). Second polymer component includes gum arabic, carboxymethylcellulose or a mixture thereof (claim 49). The aqueous solution is adjusted to pH between 4-5 (claim 59).

It is noted that Yan does not teach the boiling point of the loading materials. However, vitamin E is known in the art to have boiling point of 100°C or greater. See for example Temple at column 8, lines 55-67.

Claim Rejections - 35 USC § 103

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yan et al. US 6,974,592 and Temple et al. US 5,670,255, in view of Calanchi et al. US 5,008,117.

Yan is relied upon for the reason stated above. Yan does not expressly teach the claimed specific cellulose derivative.

Calanchi teaches a formulation for preparing microcapsule shell comprising polymer such as hydroxypropylmethylcellulose phthalate, gelatin, and gum arabic (column 2, lines 44-60). Thus, it would have been obvious to one of ordinary skill in the

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art to optimize the shell polymer of Yan using hydroxypropylmethylcellulose phthalate to obtain the claimed invention. This is because Calanchi teaches the use of polymers suitable for microcapsule shell includes hydroxypropylmethylcellulose phthalate, gelatin, and gum arabic, because Yan teaches the use of gelatin or other polymers as a component A in the two-component system (column 3, lines 13-14), and because Yan teaches polymer components can be used in mixture thereof that includes gum arabic, gelatin, and cellulosic derivative such as carboxymethylcellulose (column 3, lines 1-18).

Response to Arguments

Applicant's arguments with respect to claims 9-12 have been considered but are moot in view of the new ground(s) of rejection.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Tran whose telephone number is (571) 272-0606.

The examiner can normally be reached on M-F 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. Tran/
Primary Examiner, Art Unit 1615